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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/597,702	06/19/2000	Jin-woo Lee	Q59587	4261

7590

02/28/2003

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EXAMINER

TRUONG, LECHI

ART UNIT

PAPER NUMBER

2126

DATE MAILED: 02/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/597,702

Applicant(s)

LEE ET AL.

Examiner

LeChi Truong

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

I. Claims 1, 8, 9, 11-12 are rejected under 35 U.S.C. 103(a) as being Unpatentable over Admit Prior Art (APA) in view of Domenikos et al (US Patent 5,838,910).

**As to claim 1**, APA teaches a slaver device (slave device, page2/ Fig. 1), a Predetermined coupling device (a coupling device, page 2), the host device (the host Device, page2), a storage device (a storage device, page2), the file system (a file system, page 2), an application (the application program), operates as a storage device of the host (the same manner of using a storage device within the host, pager 2, In 1-8)

APA does not explicit teach driver media, a predetermined protocol. However, Donienikos teaches the device drive 26/ the file hierarchy (col 14, In 39-46)/ disk partition (col 4, In 4-45)/ a file directory (col 4, In 24-45), transport protocol layer (col 9, In 48-60).

It would have been obvious to apply the teaching of Domenikos to APA in order to support the connection that directs host-to-host communication between different hosts.

**As to claim 8**, APA teaches a host device (a slaver device (slave device, page2/ Fig. 1), a pred etermined coupling device (a coupling device, page 2), the host device (the host device, pagc, 2), a storage device (a storage device, page2), the file system (a file system, page 2), an application (the application program), operates as a storage device of the host (the same manner of using a storage device within the host, pager 2, In 1-8).

APA does not explicit teach a predetermined protocol, a top layer. However,

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Domenikos teaches Domemkos teaches the device drive 26/ the file hierarchy (col 14, In 39-46)/ disk partition (col 4, In 4-45)/ a file directory (col 4, In 24-45), transport protocol layer (col 9, In 48-60).

It would have been obvious to apply the teaching of Domenikos to APA in order to support the connection that directs host-to-host communication between different hosts.

**As to claim 9**, APA does not teach identifying the top layer. However, Domenikos teaches identifies the remote file pointer (col 14, In 39-50).

It would have been obvious to apply the teaching of Domenikos to APA in order to identify the path name of the file hierarchy.

**As to claim 11**, refer to the rejection of claim 1, 8.

APA does not explicit teach the bottom layer. However, Domenikos teaches the device driver 26/ the file hiechrarchy (col 14, In 39-46)/ disk partion (col 4, In 4-45)/ a file directory (col 4, In 24-45).

It would have been obvious to apply the teaching of Domenikos to APA in order to support the connection that directs host-to-host communication between different hosts.

2. Claims 2-3, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admit Prior Art (APA) in view of Domenikos et al (US Patent 5,838,910) and further in view of Jigour et at (US Patent. 5,815,426)

**As to claim 2**, APA does not teach error correction unit for storage device. However, Jigour teaches error correction (col 18, In 27-35).

It would have been obvious to apply the teaching of Jigour to APA in order to control error for host or device system.

**As to claim 3**, APA teaches application program within host device can use the storage device of slave in the same manner of using a storage device within the host device (page2, In 5-18), thus error correction unit in slave car. Perform connection to error correction unit or host device.

**As to the rejection of claim 13**, refer to the rejection of claim 3 and 9.

APA does not teach layer for error correction. However, Domenikos the file Hierarchy (col 14, In 39-46)/ disk partition (col 4, In 4-45)/ a file directory (col 4, In 24-45).

It would have been obvious to apply the teaching of Domenikos to APA in order to keep the data on directory or subdirectory of the file hierarchy as a layer of the file layer.

3. Claims 4-7, 10, 14, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admit Prior Art (APA) in view of Domenikos et al (US Patent 5,838,910). in view of Jigour et al (US Patent. 5,815,426) and further in view of Intel (Understanding the Flash Translation (FTL) Specification)

**As to claim 4**, APA does not teach a logical-to-physical converter. However, Intel teaches Logical to physical mapping (section 7.0).

It would have been obvious to apply the teaching of Intel to APA in order to translate between physical and logical addresses.

**As to claim 5**, teaches application program within host device can use the

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storage device of slave in the same manner of using a storage device within the host device (page2, In 5-18), thu, the logical-to-physical convert of the slave can perform connection to a logical-to-physical converter of the host device.

**As to claim 6**, APA teaches data (data, pagel, In 10-14), application (application, page 2,In 1-8).

APA does not explicit teach a file system driver, the logical location information. However, Domenikos et al teaches a file system, logical structure (col 4, In 1-50).

It would have been obvious to apply the teaching of Domenikos to APA in order to access data on the driver more easily.

**As to claim 7**, APA does not explicit teach a predetermined protocol layer. However, transport protocol layer (col 9, In 48-60).

It would have been obvious to apply the teaching of Domenikos to APA in order to support the connection that directs host-to-host communication between different hosts.

**As to claim 10**, see the rejection of claims 2,4,6.

**As to claim 14**, refer to the rejection of claims 5 and 9.

APA does not teach layer for a logical-to physical conversion. However, Domenikos teaches file hierarchy (col 14, In 39-46)/ disk partition (col 4, In 4-45)/ file directory( col 4, In 24-45).

It would have been obvious to apply the teaching of Domenikos to APA in order to keep data on directory of subdirectory of the file hierarchy as layer of the

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file layer.

**As to claim 15**, refer to rejection of claim 6, 7 and 9.

APA does not teach the file system drive layer. However, Domenikos teaches the file hierachirchy ( col 14, In 39-46)/ disk partition( col 4, In 4-45)/ a file directoy ( col 4, In 24-45)

It would have been obvious to apply the teaching of Domenikos to APA in order to keep data on directory of subdirectory of the file hierarchy as layer of the file layer.

**9.**

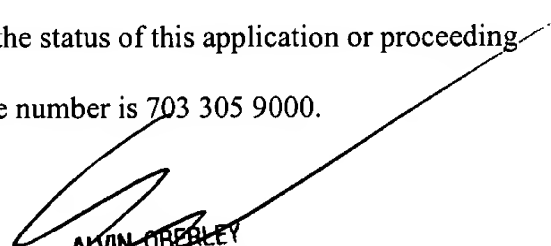
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (703) 305 5312. The examiner can normally be reached on 8 - 5.

Fax phone: AFTER\_FINAL faxes must be signed and sent to: (703) 746-2738, OFFICAL faxes must be signed and send to: (703) 746-7239, NON OFFICIAL faxes should not be signed, please send to: (703) 746-7240

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 9000.

LeChi Truong  
February 24, 2003

  
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